Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1 (original). A method for estimating the time-dispersion of a channel comprising D subchannels, wherein one computes from a received signal a set of estimated Channel Transfer Factors (CTF's) $\hat{H}[\upsilon]$, where ν ($0 \le \upsilon < D$) is the subchannel number, said method comprising a step of calculating, for a predetermined strictly positive integer d, a correlation factor C_d representing the correlations, both in amplitude and in phase, between pairs $\hat{H}[\upsilon]$ and $\hat{H}[\upsilon + d]$ of said computed CTF estimates.

2 (original). A time-dispersion estimation method according to Claim 1, characterized in that a normalized expression for said correlation factor C_d is:

$$C_d \equiv \frac{2 \cdot \left| \sum_{\nu} \hat{H}^*[\upsilon] \hat{H}[\upsilon + d] \right|}{\sum_{\nu} \left(\left| \hat{H}[\upsilon] \right|^2 + \left| \hat{H}[\upsilon + d] \right|^2 \right)} ,$$

where the sums over ν are carried over available pairs of said computed CTF estimates.

3 (original). A time-dispersion estimation method according to Claim 1, characterized in that a normalized expression for said correlation factor C_d is:

$$C_d \equiv \left(1+\frac{1}{\zeta_u}\right)\frac{2\cdot\left|\sum_{\nu}\hat{H}^*[\upsilon]\,\hat{H}[\upsilon+d]\right|}{\sum_{\nu}\left(\left|\hat{H}[\upsilon]\right|^2+\left|\hat{H}[\upsilon+d]\right|^2\right)},$$

where ζ_u is the mean channel estimation signal-to-noise ratio, and the sums over ν are carried over available pairs of said computed CTF estimates.

4 (currently amended). A time-dispersion estimation method according to ~~anyone of Claims 1 to 3~~ claim 1, characterized in that it further comprises a step of looking-up in a pre-constructed mapping table a value of channel excess delay τ corresponding to the value of said correlation factor C_d.

5 (currently amended). A time-dispersion estimation method according to ~~anyone of Claims 1 to 3~~ claim 1, characterized in that it further comprises a step of adapting some link parameters as a function of the value of said correlation factor C_d.

6 (original). A device (100) for estimating the time-dispersion of a channel comprising D subchannels, said device receiving as an input a set of estimated Channel Transfer Factors (CTF's) $\hat{H}[\upsilon]$, where ν $(0 \le \upsilon < D)$ is the subchannel number, computed from a received signal, characterized in that it comprises a correlations unit (102) capable of computing a correlation factor C_d, where d is a predetermined strictly positive integer, representing the correlations, both in

amplitude and in phase, between pairs $\hat{H}[\upsilon]$ and $\hat{H}[\upsilon+d]$ of said computed CTF estimates.

7 (original). A time-dispersion estimation device according to Claim 6, characterized in that it also comprises a parallel-to-serial unit (101) capable, when provided with a CTF vector $\hat{\mathbf{H}}$ as an input, of providing said correlations unit (102) with a series of individual CTF's $\hat{H}[\upsilon]$ classified by successive subchannel number ν.

8 (currently amended). A time-dispersion estimation device according to Claim 6 ~~or Claim 7~~, characterized in that a normalized expression for said correlation factor C_d is:

$$C_d \equiv \frac{2\cdot\left|\sum_{\nu}\hat{H}^*[\upsilon]\,\hat{H}[\upsilon+d]\right|}{\sum_{\nu}\left(\left|\hat{H}[\upsilon]\right|^2+\left|\hat{H}[\upsilon+d]\right|^2\right)},$$

where the sums over ν are carried over available pairs of said computed CTF estimates.

9 (currently amended). A time-dispersion estimation device according to Claim 6 ~~or Claim 7~~, characterized in that a normalized expression for said correlation factor C_d is:

$$C_d \equiv \left(1+\frac{1}{\zeta_u}\right)\frac{2\cdot\left|\sum_{\nu}\hat{H}^*[\upsilon]\,\hat{H}[\upsilon+d]\right|}{\sum_{\nu}\left(\left|\hat{H}[\upsilon]\right|^2+\left|\hat{H}[\upsilon+d]\right|^2\right)},$$

where ζ_u is the mean channel estimation signal-to-noise ratio, and the sums over ν are carried over available pairs of said computed CTF estimates.

10 (currently amended). A time-dispersion estimation device according to ~~anyone of Claims 6 to 9~~ claim 6, characterized in that it also comprises a look-up table (103), capable of providing a value of channel excess delay τ corresponding to the value of C_d.

11 (currently amended). A time-dispersion estimation device according to ~~anyone of Claims 6 to 9~~ claim 6, characterized in that it also comprises a link adapter responsive to the value of said correlation factor C_d.

12 (currently amended). A modulated-signal reception apparatus, characterized in that it comprises a device according to ~~anyone of Claims 6 to 11~~ claim 6.

13 (original). A telecommunications network, characterized in that it comprises at least one reception apparatus according to Claim 12.

14 (currently amended). A data storage means, characterized in that it contains computer program code instructions for executing steps of a method according to ~~any one of Claims 1 to 5~~ claim 1.

15 (original). A data storage means according to Claim 14, characterized in that it is partially or totally removable.

16 (currently amended). A computer program, characterized in that it contains instructions such that, when said program controls a programmable data processing device, said instructions mean that said data processing device implements a method according to ~~any one of Claims 1 to 5~~ claim 1.

17 (new). A time-dispersion estimation device according to claim 7, characterized in that a normalized expression for said correlation for factor C_d.

$$C_d \equiv \frac{2 \cdot \left| \sum_{\nu} \hat{H}^*[\upsilon] \hat{H}[\upsilon + d] \right|}{\sum_{\nu} \left(\left| \hat{H}[\upsilon] \right|^2 + \left| \hat{H}[\upsilon + d] \right|^2 \right)} ,$$

where the sums over ν are carried over available pairs of said computed CTF estimates.

18 (new). A time-dispersion estimation device according to claim 7, characterized in that a normalized expression for said correlation for factor C_d is:

$$C_d \equiv \frac{2 \cdot \left| \sum_{\nu} \hat{H}^*[\upsilon] \hat{H}[\upsilon + d] \right|}{\sum_{\nu} \left(\left| \hat{H}[\upsilon] \right|^2 + \left| \hat{H}[\upsilon + d] \right|^2 \right)} ,$$

where ζ_u is the mean channel estimation signal-to-noise ratio, and the sums over ν are carried over available pairs of said computed CTF estimates.

19 (new). A time-dispersion estimation device according to claim 7, characterized in that it also comprises a look-up table (103), capable of providing a value of channel excess delay τ corresponding to the value of C_d.

20 (new). A time-dispersion estimation device according to claim 7, characterized in that it also comprises a link adapter responsive to the value of said correlation factor C_d.